Look-Up Table Addressing Scheme
Warm Shaw Yuan
Mingming Zhang
Handi Santosa

5

ABSTRACT OF THE DISCLOSURE

A method for performing a table look-up operation on a first table having N entries includes generating a second table having kN entries based on the first table. The method includes generating a first data field for the second table including table index values having a second interval derived from a first interval of the table index values of the first table and represented by an n-bit binary number; and generating a second data field including computed table values derived from the computed table values of the first table or computed based on the function defining the second data field. The method further includes computing an index value z, extracting address bits from the index value z, where the address bits are data bits more significant than the $(n-1)$th bit of the index value z, and addressing the second table using the address bits.